

### Remarks

Reconsideration of this patent application is respectfully requested, particularly as herein amended.

Responding to the issues presented in the Office Action mailed March 17, 2003, in turn, claims 1, 2, 4, 7 and 8 have been rejected under 35 U.S.C. §102(b) as anticipated by a patent to Feygin (No. 4,752,352), or in the alternative, under 35 U.S.C. §103(a) as obvious over Feygin. Claims 1 to 8 have also been rejected under 35 U.S.C. §103(a) as being unpatentable over a proposed combination of Feygin with patents to Thomas et al. (No. 5,663,883) or Weaver (No. 5,031,483), in further combination with a patent to Kinzie (No. 5,015,312).

The present application generally relates to a method for producing mechanical parts, such as prototype parts, from an assembly of laminations produced responsive to a computer-aided design. As a result, and as the Examiner correctly notes, some of the elements of applicant's claims correspond to elements of the methods previously used to manufacture such mechanical parts.

In accordance with the present invention, however, a different approach is used to assemble the laminations which are to form the mechanical part, an approach which has been found to be particularly useful in the manufacture of mechanical parts from the relatively thin laminations which are best suited to the manufacture of fine contours needed to implement precise and/or

complex structures.

To this end, the laminations are provided with central portions for defining the mechanical part, outer portions for at least partially surrounding the central portions and including structure engaging orifices, and a plurality of frangible bridges connecting the central portions and the outer portions together. In practice, the laminations are built up by causing the orifices of the outer portions to engage an aligning element. Layers defined by the central portions of the laminations are combined to produce the mechanical part. The outer portions are combined to produce an outer surround connected to the mechanical part by the frangible bridges, for supporting the assembly during the formation of the mechanical part. Following this, the frangible bridges are severed and the outer surround is separated from the assembled mechanical part.

Feygin also discloses a method for producing mechanical parts from an assembly of laminations and, as the Examiner notes in referring to Fig. 13 of Feygin, a lamination is suggested which includes two portions 154, 156 connected by thin strips 158, and the portion 154 includes a pair of locating holes 80 which can be engaged by the locating pins 78 during assembly of the laminations. It is important to note, however, that both of the portions 154, 156 of Feygin's laminations form portions of the three-dimensional object 22 (see, for example, column 8, lines 6 to 20; and column 11, lines 15 to 35, referring also to Figures 1A to 1C).

Because the three-dimensional object 22 of Feygin is comprised of the stacked portions 154 and 156, the assembly including the stacked portions 154 is not, and indeed cannot be separated from the assembly including the stacked portions 156. Otherwise, the object 22 would be destroyed. This is so even if the thin strips 158 were to be severed, as is suggested in the Office Action. In any event, the object 22 would then become separated into two unusable parts.

This is to be distinguished from applicant's process, which specifically calls for separation of the mechanical part from the outer surround which supported the assembly during formation of the mechanical part.


Accordingly, it is submitted that applicant's claims are neither anticipated by Feygin, nor that the teachings of Feygin would have suggested applicant's claimed improvements to the person of ordinary skill in the art at the time the present invention was made. It is further submitted that the teachings of Thomas et al. or Weaver and Kinzie also fail to show the improvements called for in applicant's claims, and consequently, that applicant's claimed improvements would not have been suggested to the person of ordinary skill in the art at the time the present invention was made by a combination of the teachings of Feygin, Thomas et al. or Weaver and Kinzie, even if made.

Claims 1 to 8 have also been rejected under 35 U.S.C. §112, second paragraph, as being indefinite for stated reasons.

In reply, original claims 1 to 8 have been canceled and replaced with new claims 9 to 23, which have been drafted to comply with the requirements of 35 U.S.C. §112, second paragraph. In the event that any additional issues are identified which may require further consideration, the Examiner is invited to telephone the undersigned to discuss and resolve such issues.

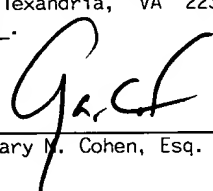
Accordingly, it is submitted that the present application has been placed in condition for allowance and corresponding action is earnestly solicited.

Respectfully submitted,

  
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I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" on September 17, 2003.

Date: 9/17/03

  
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Gary M. Cohen, Esq.